

(19) World Intellectual Property
Organization
International Bureau



552 178

(43) International Publication Date
21 October 2004 (21.10.2004)

PCT

(10) International Publication Number
WO 2004/090163 A1

- (51) International Patent Classification⁷: C12Q 1/68, G01N 33/574
- (74) Agents: SHIMIZU, Hatsushi et al.; Kantetsu Tsukuba Bldg. 6F, 1-1-1, Oroshi-machi, Tsuchiura-shi, Ibaraki 300-0847 (JP).
- (21) International Application Number: PCT/JP2003/004458
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: 8 April 2003 (08.04.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (71) Applicant (*for all designated States except US*): F.HOFFMANN-LA ROCHE AG [CH/CH]; 124, Grenzacherstrasse, CH-4070 Basle (CH).
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): OKA, Masaaki [JP/JP]; 3-5-8, Kitasakoshinmachi, Ube-shi, Yamaguchi 755-0093 (JP). HAMAMOTO, Yoshihiko [JP/JP]; 166-2, Ohaza Okiube, Ube-shi, Yamaguchi 755-0001 (JP). IIZUKA, Norio [JP/JP]; 396-2, Nishikiwa, Ube-shi, Yamaguchi 755-0151 (JP). OKABE, Hisafumi [JP/JP]; 5-4-3, Syoudo, Sakae-ku, Yokohama-shi, Kanagawa 247-0022 (JP). HAMADA, Kenji [JP/JP]; 205 Leoplace Marine, 1-8-16, Kugenumakaigan, Fujisawa-shi, Kanagawa 251-0037 (JP).
- Published:**
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: METHOD OF DEFINING THE DIFFERENTIATION GRADE OF TUMOR

(57) Abstract: The present invention relates to a method of defining the differentiation grade of tumor by selecting genes and/or proteins whose expression level correlates with each differentiation grade of tumor, measuring the expression of the genes and/or proteins of human tumor tissues in each differentiation grade. The present invention also relates to the use of these genes and/or proteins for diagnosing the differentiation grade of tumor and for screening anti-cancer agents for tumor treatment.



WO 2004/090163 A1